AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1.-2. (cancelled)

3. (currently amended) The method of claim 2̶ 21, wherein the traffic regulation

signal blocks all end-users or end users of a specific class, the class being defined by one or more

of priority, quality of service, or privilege.

4. (currently amended) The method of claim 2̶ 21, wherein the network has a

protocol controlling access to the network, the traffic regulation signal being consistent with the

protocol..

5. (original) The method of claim 4, wherein the protocol uses one of in-band

signals, out-of-band signals or independent channel signals to control access to the network..

6. (currently amended) The method of claim 1̶ 21, wherein the adjusting

comprises:

monitoring an amount of unused capacity on the network; and

asserting a traffic regulation signal in the network if the amount of unused

capacity is less than a desired amount.

7. (original) The method of claim 6, wherein the monitoring is performed by

media access controllers (MACs) for each media of the network that requires access control, the

media access controllers controlling a local reserve capacity of each respective media based on

system parameters and monitoring data generated by each of the MACs.

8. (original) The method of claim 7, further comprising:

exchanging the monitoring data among the MACs; and

asserting the traffic regulation signals in each of the media to achieve network performance requirements.

9. (original) The method of claim 7, wherein a central regulation controller controls network traffic regulation, the method further comprising:

receiving in the central traffic regulation controller the monitoring data generated by the MACs, and

issuing traffic regulation commands from the central traffic regulation controller to the MACs to regulate traffic in each of the media to achieve network performance requirements.

10. (original) The method of claim 7, wherein each of the MACs is one of a dedicated media access controller of an end-user that includes a media access function.

11.-12. (cancelled)

13. (currently amended) The ~~method~~ system of claim ~~12~~ 22, wherein the traffic regulation signal blocks all end-users of the media or end-users of a specific class of the media, the class being defined by one or more of priority, quality of service, or privilege.

14. (currently amended) The ~~method~~ system of claim ~~12~~ 22, wherein the media has a protocol controlling access to the network, the traffic regulation signal being consistent with the protocol.

15. (currently amended) The ~~method~~ system of claim 14, wherein the protocol uses one of in-band signals, out-of-band signals or independent channel signals to control access to the media.

16. (currently amended) The ~~method~~ system of claim ~~11~~ 22, wherein each of the MACs monitors an amount of unused capacity of a media controlled by each of the MACs, and asserts a traffic regulation signal in the media if the amount of unused capacity is less than a desired amount.

17. (currently amended) The ~~method~~ system of claim 16, wherein each of the MACs controls a local reserve capacity based on system parameters and monitoring data generated by one of more of the MACs.

18. (currently amended) The ~~method~~ system of claim 17, wherein each of the MACs exchanges the monitoring data with other ones of the MACs and asserts the traffic regulation signals in reach of the media to achieve network performance requirements.

19. (currently amended) The ~~method~~ system of claim 17, further comprising a central traffic regulation controller that controls network traffic regulation, the central traffic regulation controller receives the monitoring data generated by the MACs, and issues traffic regulation commands to the MACs to regulate traffic in each of the media to achieve network performance requirements.

20. (currently amended) The ~~method~~ system of claim 17, wherein each of the MACs is one of a dedicated media access controller or an end-user that includes a media access function.

21. (re-presented, formerly dependent claim 2) A method for regulating traffic in a network, comprising:

making unavailable an amount of network transmission capacity as reserve capacity, by blocking end-users from gaining access to the network by asserting a traffic regulation signal in a channel of the network; and

adjusting the amount of reserve capacity based on a desired network performance.

22. (re-presented, formerly dependent claim 12) A network traffic regulation system, comprising:

a network that includes media, and;

media access controllers (MACs); each of the MACs controlling one of more media of the network, each of the MACs

(1) making unavailable an amount of media transmission capacity as reserve capacity, by blocking end-users from gaining access to the network by asserting a traffic regulation signal in a channel of the media controlled by each of the MACs, and

(2) adjusting the amount of reserve capacity based on a desired network performance.